

# Environmental and Natural Resources Management

## Course Description

A course that provides an opportunity for students to increase awareness of the close ties among living organisms as well as natural and environmental concerns with the interrelationships of living organisms and the world around us. Students will closely examine agencies that regulate our natural resources, explore the relationship between agriculture and natural resources, and develop an understanding of sustainability and the importance of conservation. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and

**Course Code:** 013002

## Endorsements to

**teach:** AFNR

## Programs of Study to which this Course applies:

Environmental and Natural Resources

Environmental and Natural Resources Plus

AFNR.HS.3.1	
Plan and conduct natural resource management activities that apply logical, reasoned and scientifically based solutions to natural resource issues and goals.	
AFNR.HS.3.1.a	Identify today's common resources management practices and explain the importance of them for sustainability.
AFNR.HS.3.1.b	Explain population levels and carrying capacity.
AFNR.HS.3.1.d	Apply cartographic skills to natural resources.
AFNR.HS.3.1.e	Distinguish between various GPS systems and their operations.
AFNR.HS.3.2	
Analyze the interrelationships between natural resources and humans.	
AFNR.HS.3.2.a	Summarize the impacts that modern agriculture has had on our natural resources.
AFNR.HS.3.2.b	Examine and summarize how social views and movements (carbon footprints, recycling, etc. have affected the need for environmental regulations.
AFNR.HS.3.2.c	Describe current programs in place to help with the conservation and sustainability of natural resources and explain their importance.
AFNR.HS.3.2.f	Define conservation in production agriculture and provide examples of conservation practices affecting natural resources within agriculture.
AFNR.HS.3.2.g	Explain how technology has affected the use of our natural resources.
AFNR.HS.3.2.h	Examine natural resources and environmental careers.
AFNR.HS.3.2.i	Communicate thoughts and feelings with others regarding environmental and natural resources using verbal and nonverbal communication.
AFNR.HS.3.3	
Develop plans to ensure sustainable production and processing of natural resources.	
AFNR.HS.3.3.b	Explain the stages of water movement through the hydrologic cycle and how the parts of the system are managed.
AFNR.HS.3.3.c	Summarize the roles of watersheds.
AFNR.HS.3.3.d	Distinguish between chemical and physical properties of drinking water.
AFNR.HS.3.3.f	Outline the methods used to determine water quality.
AFNR.HS.3.3.g	Discover the economic value of the forestry industry.
AFNR.HS.3.3.i	Explain the processes in the nitrogen cycle.
AFNR.HS.3.3.k	Demonstrate how to determine soil types and and how it affects land use.
AFNR.HS.3.4	
Demonstrate responsible management procedures and techniques to protect, maintain, enhance, and improve natural resources.	
AFNR.HS.3.4.b	Identify the efforts being made to keep non-native species out of a local area.
AFNR.HS.3.4.d	Calculate the financial cost of non-native species.
AFNR.HS.3.6	
Analyze how natural resources impact the economy.	
AFNR.HS.3.6.a	Associate the importance of environments and wildlife to local economy and recreational activities.

<b>AFNR.HS.CR.1</b>	
<b>Describe career opportunities and means to achieve those opportunities in each of the AFNR career pathways.</b>	
AFNR.HS.CR.1.a	Evaluate and implement the steps and requirements to pursue a career opportunity in an AFNR career pathway.
AFNR.HS.CR.1.b	Examine and choose career opportunities that are matched to personal life skills, talents, and career goals in an AFNR pathway of interest.
<b>AFNR.HS.CR.2</b>	
<b>Demonstrate employability skills for college and career readiness.</b>	
AFNR.HS.CR.2.a	Model personal responsibility in the workplace and community.
AFNR.HS.CR.2.d	Synthesize information, knowledge and experience to generate original ideal and challenge assumptions in the workplace and community.
AFNR.HS.CR.2.e	Apply reason and logic to evaluate workplace and community situations from multiple perspectives.
AFNR.HS.CR.2.f	Investigate, prioritize and select solutions to solve problems in the workplace community.
AFNR.HS.CR.2.g	Contribute to team-oriented projects and builds consensus to accomplish results using cultural global competence in the workplace and community.
<b>AFNR.HS.CR.3</b>	
<b>Identify and demonstrate personal financial management and planning.</b>	
AFNR.HS.CR.3.a	Design and implement a personal financial management plan.
<b>AFNR.HS.CR.4</b>	
<b>Identify and demonstrate workplace safety.</b>	
AFNR.HS.CR.4.a	Identify and explain the implication of required regulations to maintain and improve safety, health and environments management systems.
AFNR.HS.CR.4.b	Apply health and safety practices to AFNR workplaces.
AFNR.HS.CR.4.c	Use appropriate protective equipment and demonstrate safe and proper use of AFNR tools and equipment.
<b>AFNR.HS.CR.5</b>	
<b>Evaluate the nature and scope of the AFNR Career Cluster and the role of agriculture, food and natural resources (AFNR) in society and the economy.</b>	
AFNR.HS.CR.5.b	Identify public policies and examine their impact on AFNR systems.
AFNR.HS.CR.5.c	Examine the components of the AFNR systems and assess their impact on the local, state, national and global society and economy.
<b>AFNR.HS.CR.6</b>	
<b>Identify and demonstrate leadership skills and traits in demand of leadership roles in the agriculture industry.</b>	
AFNR.HS.CR.6.b	Craft SMART goals to achieve by the end of a specific agricultural education course.
AFNR.HS.CR.6.c	Write a career objective.
AFNR.HS.CR.6.f	Write and deliver a speech focused on a currently controversial topic within the agricultural industry while arguing both points of view.